#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001983 Address: 333 Burma Road **Date Inspected:** 10-Apr-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1830 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Huang Wen Pang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG Floor Beams** 

### **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

#### Bay 2- New Tower Building

Ultrasonic Observation

The QA Inspector observed ZPMC Ultrasonic Testing (UT) Technicians performing full volumetric ultrasonic testing of Complete Joint Penetration (CJP) weld repair on the tower skin plate splice connection designated ESD1-SA197A/J-16A/B. The QA Inspector observed ZPMC personnel using a 45 shear wave transducer/plastic wedge combination to examine the top quarter of the weld and a 70 shear wave transducer/plastic wedge combination to examine both the middle half and bottom quarter of the weld respectively. Once the UT was completed, ZPMC personnel documented multiple rejectable indications.

#### Bay 7- Orthotropic Box Girder

**Ultrasonic Testing** 

The QA Inspector also performed UT on approximately 10% of welds previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. The QA Inspector examined a total of approximately 560mm of the weld length and observed no rejectable indications at the time of testing. The QA Inspector generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications. Accepted weld identification numbers were SP021-001-001 & BP001-038 at top flange and web.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

The QA Inspector spoke with the ZPMC QC personnel regarding the general location and work scheduled for the day.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer